



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/037,822 03/10/98 MOTOYAMA

S 25484.00643

EXAMINER

TM02/0809

DAVID L. FEHRMAN
MORRISON & FOERSTER LLP
555 WEST FIFTH STREET, SUITE 3500
LOS ANGELES CA 90013-1024

WILLETT, S

ART UNIT

PAPER NUMBER

2152

DATE MAILED:

08/09/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/037,822

Applicant(s)
Motoyama

Examiner
Stephan Willett

Art Unit
2152



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Jun 12, 2001

2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 29, 30, 32-34, 36-38, and 40-46 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 29, 30, 32-34, 36-38, and 40-46 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 13

20) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 29, 33, 37, 41-46 rejected under 35 U.S.C. 103(a) as being unpatentable over Moline et al. with Patent Number 5,883,957 in view of Holmes with patent Number 5,999,969.
3. Regarding claims 29, 33, 37, 41-46 Moline teaches a quasi-real time or streaming MIDI sound playing technique. Moline teaches *reception means for receiving data blocks, each block containing time information and chronological data which represents chronological order* as "MIDI file reader includes two subcomponents ... parser reads events in order from track, each event of course includes event message and elapsed time descriptor" at col. 6, lines 44-48 in Moline et al, "the amount of track that must be accumulated before receiver begins playing the track is determined by a delay parameter set by the user of receiver" (see Moline et al. col. 12, lines 1-3) and any protocol would have chronological data. Moline teaches *storing means for temporarily storing the control data blocks received by said reception means* as "MIDI stream generator keeps track of the last event that it output, the amount of time that has actually elapsed since it began playing the track, and the total amount of time specified by the elapsed time indicators in events played thus far", (see Moline et al. col. 6, lines 26-31) and "the result of this operation is an event, which is then added to stored track in memory" at col. 6, lines

53-54. Moline teaches *judging means* for judging from the time information contained in the control block whether a predetermined time has passed as "the delay varies . the preferred embodiment waits to begin [subtracts] playing track until enough of track has accumulated" (see Moline et al. col. 11, lines 59-64), "beginning at the start of stored track, the time stamp of each event is added to the server start time and subtracted from the play time", col. 13, lines 12-14 and "MIDI stream generator generates MIDI stream from stored track as follows: ... set the timer and wait for it to expire again" at col. 7, lines 10-20 in Moline et al.. Moline teaches *processing means for starting the processing of the control data blocks temporarily stored in said memory in accordance with said chronological data in said control block, when said judging means judges that the predetermined time has passed* as "output event messages until either an event is reached whose time stamp is greater", and "this incremental addition of parts", col. 7, 8, lines 15-16, 4-6 in Moline et al. Moline teaches the invention in claim 1 except for explicitly *teaching a chronological data*. In that Moline operates to buffer data for quasi-real time play the artisan would have looked to the computer data streaming arts for details of buffering signals. In that art, Holmes, a related data buffering system, teaches a chaining of data streams. Holmes, specifically teaches that "messages are 'chained' together to preserve their chronological order" at col. 3, lines 29-30. Chronological data is taught that is used to determine order. The motivation to incorporate a chronological data insures that data is properly ordered. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the chronological data as taught in Holmes into the MIDI player described in the Moline patent because Moline operates with delay times to achieve streaming data and Holmes suggests that streaming of data can be obtained with ordered data. Therefore, by the above rational, the above claim(s) are rejected.

4. Claims 29, 33, 37, 41-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moline et al. with Patent Number 5,883,957 in view of Shioda with patent Number 5,430,243.

5. Regarding claims 29, 33, 37, 41-46 Moline teaches a quasi-real time or streaming MIDI sound playing technique. Moline teaches *reception means for receiving data blocks, each block containing time information and chronological data which represents chronological order* as "MIDI file reader includes two subcomponents ... parser reads events in order from track, each event of course includes event message and elapsed time descriptor" at col. 6, lines 44-48 in Moline et al, "the amount of track that must be accumulated before receiver begins playing the track is determined by a delay parameter set by the user of receiver" (see Moline et al. col. 12, lines 1-3) and any protocol would have chronological data. Moline teaches *storing means for temporarily storing the control data blocks received by said reception means* as "MIDI stream generator keeps track of the last event that it output, the amount of time that has actually elapsed since it began playing the track, and the total amount of time specified by the elapsed time indicators in events played thus far", (see Moline et al. col. 6, lines 26-31) and "the result of this operation is an event, which is then added to stored track in memory" at col. 6, lines 53-54. Moline teaches *judging means* for judging from the time information contained in the control block whether a predetermined time has passed as "the delay varies . the preferred embodiment waits to begin [subtracts] playing track until enough of track has accumulated" (see Moline et al. col. 11, lines 59-64), "beginning at the start of stored track, the time stamp of each event is added to the server start time and subtracted from the play time", col. 13, lines 12-14 and "MIDI stream generator generates MIDI stream from stored track as follows: ... set the timer and wait for it to expire again" at col. 7, lines 10-20 in Moline et al.. Moline teaches *processing*

means for starting the processing of the control data blocks temporarily stored in said memory in accordance with said chronological data in said control block, when said judging means judges that the predetermined time has passed as "output event messages until either an event is reached whose time stamp is greater", and "this incremental addition of parts", col. 7, 8, lines 15-16, 4-6 in Moline et al. Moline teaches the invention in claim 1 except for explicitly *teaching a predetermined time*. In that Moline operates to buffer data for quasi-real time play the artisan would have looked to the computer data streaming arts for details of buffering signals. In that art, Shioda, a related data buffering system, teaches a "basic delay time", col. 4, lines 37 in order to delay "a voice and/or musical tone produced by an electronic musical instrument", col. 4, lines 37-38. Shioda, specifically teaches that "a basic delay time-calculating routine for calculating a basic delay time based on a timing clock of a MIDI signal is started" at col. 4, lines 46-48. A timing clock is taught that is used to determine delay times. Further, Shioda suggests that "an excellent repeat effect to the performance", col. 1, lines 65-66 will result from applying the delay times. The motivation to incorporate a delay time insures that a reference time is used to accurately apply delay times. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the delay time as taught in Shioda into the MIDI player described in the Moline patent because Moline operates with delay times to achieve streaming data and Shioda suggests that streaming of data can be obtained with timers and set times. Therefore, by the above rational, the above claim(s) are rejected.

6. Claims 30, 34, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moline et al. with Patent Number 5,883,957 in view of Shores with patent Number 5,194, 996.

7. Regarding claims 30, 34, 38 Moline teaches a quasi-real time or streaming MIDI sound

playing technique. Moline teaches *reception means for receiving data blocks, each block containing time information and chronological data which represents chronological order* as "MIDI file reader includes two subcomponents ... parser reads events in order from track, each event of course includes event message and elapsed time descriptor" at col. 6, lines 44-48 in Moline et al, "the amount of track that must be accumulated before receiver begins playing the track is determined by a delay parameter set by the user of receiver" (see Moline et al. col. 12, lines 1-3) and any protocol would have chronological data. Moline teaches *storing means for temporarily storing the control data blocks received by said reception means* as "MIDI stream generator keeps track of the last event that it output, the amount of time that has actually elapsed since it began playing the track, and the total amount of time specified by the elapsed time indicators in events played thus far", (see Moline et al. col. 6, lines 26-31) and "the result of this operation is an event, which is then added to stored track in memory" at col. 6, lines 53-54. Moline teaches *judging means* for judging from the time information contained in the control block whether a predetermined time has passed as "the delay varies . the preferred embodiment waits to begin [subtracts] playing track until enough of track has accumulated" (see Moline et al. col. 11, lines 59-64), "beginning at the start of stored track, the time stamp of each event is added to the server start time and subtracted from the play time", col. 13, lines 12-14 and "MIDI stream generator generates MIDI stream from stored track as follows: ... set the timer and wait for it to expire again" at col. 7, lines 10-20 in Moline et al.. Moline teaches *processing means for starting the processing of the control data blocks temporarily stored in said memory in accordance with said chronological data in said control block, when said judging means judges that the predetermined time has passed* as "output event messages until either an event is

reached whose time stamp is greater", and "this incremental addition of parts", col. 7, 8, lines 15-16, 4-6 in Moline et al. Moline teaches the invention in claim 1 except for explicitly *teaching a recovery data*. In that Moline operates to buffer data for quasi-real time play the artisan would have looked to the computer data streaming arts for details of buffering signals. In that art, Shores, a related data buffering system, teaches a data format for data streams. Shores, specifically teaches that "each data field has redundant data to enable the detection and correction of data in a the data field upon decoding" at col. 2, lines 9-11. Recovery data is taught that is used to correct for losses. The motivation to incorporate a recovery data insures that data is properly recovered. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the recovery data as taught in Shores into the MIDI player described in the Moline patent because Moline operates with delay times to achieve streaming data and Shores suggests that streaming of data can be obtained while recovering data. Therefore, by the above rational, the above claim(s) are rejected.

8. Claims 32, 36, 40, are rejected under 35 U.S.C. 103(a) as being unpatentable over Moline et al. with Patent Number 5,883,957 in view of Iizuka et al. with patent Number 5,974,015

9. Regarding claims 32, 36, 40 Moline teaches a quasi-real time or streaming MIDI sound playing technique. Moline teaches *reception means for receiving data blocks, each block containing time information and chronological data which represents chronological order* as "MIDI file reader includes two subcomponents ... parser reads events in order from track, each event of course includes event message and elapsed time descriptor" at col. 6, lines 44-48 in Moline et al, "the amount of track that must be accumulated before receiver begins playing the track is determined by a delay parameter set by the user of receiver" (see

Moline et al. col. 12, lines 1-3 and any protocol would have chronological data. Moline teaches *storing means for temporarily storing the control data blocks received by said reception means* as "MIDI stream generator keeps track of the last event that it output, the amount of time that has actually elapsed since it began playing the track, and the total amount of time specified by the elapsed time indicators in events played thus far", (see Moline et al. col. 6, lines 26-31) and "the result of this operation is an event, which is then added to stored track in memory" at col. 6, lines 53-54. Moline teaches *judging means* for judging from the time information contained in the control block whether a predetermined time has passed as "the delay varies . the preferred embodiment waits to begin [subtracts] playing track until enough of track has accumulated" (see Moline et al. col. 11, lines 59-64), "beginning at the start of stored track, the time stamp of each event is added to the server start time and subtracted from the play time", col. 13, lines 12-14 and "MIDI stream generator generates MIDI stream from stored track as follows: ... set the timer and wait for it to expire again" at col. 7, lines 10-20 in Moline et al.. Moline teaches *processing means for starting the processing of the control data blocks temporarily stored in said memory in accordance with said chronological data in said control block, when said judging means judges that the predetermined time has passed* as "output event messages until either an event is reached whose time stamp is greater", and "this incremental addition of parts", col. 7, 8, lines 15-16, 4-6 in Moline et al. Moline teaches the invention in claim 1 except for explicitly *teaching removing unnatural data*. In that Moline operates to buffer data for quasi-real time play the artisan would have looked to the computer data streaming arts for details of buffering signals. In that art, Iizuka, a related data buffering system, teaches a data format for preventing unnatural data. Iizuka, specifically teaches "in order to prevent an unnatural sound or data" at col. 1, lines

54-55. Unnatural data suppressions is taught that is used to improve quality. The motivation to incorporate unnatural data suppression insures that data is clear. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the unnatural data suppression as taught in Iizuka into the MIDI player described in the Moline patent because Moline operates with delay times to achieve streaming data and Iizuka suggests that streaming of data can be obtained while suppressing unnatural data. Therefore, by the above rational, the above claim(s) are rejected.

Response to Amendment

10. Based on the new grounds for rejection the applicants arguments are moot. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.

11. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

12. Applicant suggests "MIDI data" in Paper No. 16, Page 10, lines 2-3. The above argument is not commensurate with what is presently claimed and therefore will not be considered at this time. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

13. Applicant suggests "reading received MIDI data in order does not mean that Moline uses sequences data to read MIDI data in order" Paper No. 16, Page 10, lines 2-3. Moline teaches "this incremental addition of parts", col. 8, lines 4-6 along with adding tracks that clearly teaches chronological data. Based on the breadth of the claims, TCP on the Internet that used chronological data of packet numbers to reconstruct data would read on the claims. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited.

15.. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606.

19. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605.

sfw

August 7, 2001



MARK H. RINEHART
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100